

Amendment to the Claims

Please cancel claims 12-39 without prejudice to pursuing these claims in a continuation, divisional, continuation-in-part or other application. Following is a complete listing of claims, as amended:

1. (Original) A microfeature device package system, comprising:
a microfeature device;
a plurality of device contacts electrically coupled to structures within the microfeature device;
a conductive structure electrically connected to at least one of the plurality of device contacts, the conductive structure having a plurality of first and second package contacts accessible for electrical coupling to at least one device external to the package, the first package contacts being accessible from a first direction for coupling and the second package contacts being configured to receive solder balls and being accessible from a second direction for coupling, the second direction being opposite the first direction; and
an encapsulant disposed adjacent to the microfeature device and the conductive structure, the encapsulant having apertures with aperture walls aligned with the second package contacts to contain solder balls carried by the second package contacts.
2. (Original) The system of claim 1 wherein the conductive structure includes a leadframe having a plurality of elongated leadfingers, and wherein the first package contacts includes generally flat, elongated surfaces of the leadfingers, and wherein the second package contacts include end surfaces of the leadfingers.
3. (Original) The system of claim 1 wherein the microfeature device has an at least generally planar first surface facing in the first direction and an at least generally planar second surface facing in the second direction, and wherein the plurality of device contacts are positioned at least proximate to the second surface.

4. (Original) The system of claim 1 wherein the first package contacts are arranged in a first pattern, and wherein the second package contacts are arranged in a second pattern different than the first pattern.

5. (Original) The system of claim 1 wherein the first package contacts are arranged adjacent to a periphery of the package, and wherein the second package contacts are arranged in an array with at least some of the second package contacts spaced apart from the periphery of the package.

6. (Original) The system of claim 1, further comprising solder balls disposed on the second package contacts.

7. (Original) The system of claim 1 wherein the conductive structure includes a leadframe attached to the microfeature device, and wherein the leadframe includes a plurality of elongated leadfingers, with each leadfinger having a first end portion positioned to make electrical contact a first type of external device, each leadfinger further having a second end portion wirebonded to at least one of the device contacts, each leadfinger still further having an intermediate portion between the first and second end portions, the intermediate portion carrying a solder ball to make electrical contact with a second type of external device.

8. (Original) The system of claim 1 wherein the microfeature device includes a first microfeature device and wherein the device contacts include first device contacts, and wherein the package further comprises a second microfeature device having second device contacts and being stacked relative to the first microfeature device, with the conductive structure being electrically connected to at least one of the second device contacts.

9. (Original) The system of claim 1, further comprising the device external to the package, and wherein the device external to the package includes a printed circuit

board having circuitry electrically coupled to of the first package contacts or the second package contacts.

10. (Original) The system of claim 1, further comprising:
the device external to the package, and wherein the device external to the package includes a printed circuit board having circuitry electrically coupled to the first package contacts or the second package contacts;
at least one of a processor and a memory device coupled to the printed circuit board;
an input device coupled to the printed circuit board;
an output device coupled to the printed circuit board; and
an enclosure disposed around the printed circuit board and the microfeature device.

11. (Original) The system of claim 1 wherein the microfeature device includes a memory chip.

12-39. (Canceled)

40. (Original) A method for assembling a microfeature device system, comprising:

positioning a microfeature device package proximate to an external device, the microfeature device package having at least one microfeature device electrically coupled to a conductive structure, the conductive structure having first and second terminal portions accessible for electrical coupling to an external terminal portion of the external device, the first terminal portion having first package contacts accessible from a first direction for coupling, the second terminal portion having second package contacts configured to receive solder balls and being accessible from a second direction for coupling, the second direction being opposite the first direction, the microfeature device package further having an encapsulant

disposed adjacent to the microfeature device and the conductive structure, the encapsulant having apertures with aperture walls aligned with the second package contacts to contain solder balls carried by the second package contacts;

selecting one of the first and second terminal portions for coupling with the external terminal portion; and

coupling the one of the first and second terminal portions with the external terminal portion.

41. (Original) The method of claim 40, further comprising orienting the one of the first and second terminal portions to face toward the external terminal portion.

42. (Original) The method of claim 40, further comprising:

determining if the external terminal portion is more compatible with the first terminal portion than with the second terminal portion;

if the external terminal portion is more compatible with the first terminal portion than with the second terminal portion, coupling the external terminal portion to the first terminal portion of the microfeature device package; and

if the external terminal portion is more compatible with the second terminal portion than with the first terminal portion, coupling the external terminal portion to the second terminal portion.

43. (Original) The method of claim 40 wherein positioning a microfeature device package proximate to an external device includes positioning the microfeature device package proximate to a printed circuit board having circuitry, and wherein coupling the one of the first and second terminal portions with the external terminal portion includes coupling the one terminal portion with the circuitry of the printed circuit board.

44. (Original) The method of claim 40 wherein positioning a microfeature device package proximate to an external device includes positioning the microfeature device package proximate to a printed circuit board having circuitry, and wherein coupling the one of the first and second terminal portions with the external terminal portion includes coupling the one terminal portion with the circuitry of the printed circuit board, and wherein the method further comprises:

coupling at least one of a processor and a memory device to the printed circuit board;

coupling an input device to the printed circuit board;

coupling an output device to the printed circuit board; and

disposing an enclosure around the printed circuit board and the microfeature device.

45. (Original) The method of claim 40 wherein positioning a microfeature device package proximate to an external device includes positioning a microfeature device package having first and second stacked microfeature devices.